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Kimberly Hughes

Date

July 19, 2004

Signature

Kimberly Hughes

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: Michael I. Miga

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Conf. No.: 9523

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Group Art Unit: 2621

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Appln. No.: 10/787,056

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Examiner: Not Yet Assigned

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Filing Date: February 24, 2004

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Attorney Docket No.: 9823-24U1 (VU0358)

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Title: ELASTOGRAPHY IMAGING MODALITIES FOR CHARACTERIZING
PROPERTIES OF TISSUE

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(b)

Enclosed are copies of each of the documents listed on the attached Information Disclosure Citation Form(s) PTO/SB/08A and/or B, which may be material to the patentability of this application and/or for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56.

The filing of this Information Disclosure Statement shall not be construed as an admission that any of the listed documents constitutes prior art, nor as an admission against interest in any manner.

No fee is believed to be due in connection with the filing of this Information Disclosure Statement since it is being filed within three months of the filing date of the above-identified application. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayments to Deposit Account No. 50-1017.

It is respectfully requested that this Information Disclosure Statement and the documents listed on the attached Form PTO/SB/08A and/or B be considered and acknowledged by the Examiner in connection with the above-identified patent application, be made of record therein, and that the listed document(s) be cited in the issued patent.

Respectfully submitted,

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July 19, 2004
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CAJ/JDS/krh
Enclosures



Form PTO/SB/08B		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/787,056
		Filing Date	February 24, 2004
		First Named Inventor	Michael I. Miga
		Group Art Unit	2621.
		Examiner Name	Not Yet Assigned
Sheet	1 of 2	Attorney Docket Number	9823-24U1 (VU0358)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
	R. MUTHUPILLAI et al., "Magnetic-Resonance Elastography By Direct Visualization of Propagating Acoustic Strain Waves," Science, Vol. 269, pp. 1854-1857, 1995.	
	E. E. W. VAN HOUTEN et al., "Elasticity Reconstruction From Experimental MR Displacement Data: Initial Experience With An Overlapping Subzone Finite Element Inversion Process," Medical Physics, Vol. 27, pp. 101-107, 2000.	
	R. SINKUS et al., "High-Resolution Tensor MR Elastography For Breast Tumour Detection," Physics in Medicine and Biology, Vol. 45, pp. 1649-1664, 2000.	
	J. BISHOP, et al., "Two-Dimensional MR Elastography With Linear Inversion Reconstruction: Methodology And Noise Analysis," Physics in Medicine and Biology, Vol. 45, pp. 2081-2091, 2000.	
	J. OPHIR et al., "Elastography: A Systems Approach," International Journal of Imaging Systems and Technology, Vol. 8, pp. 89-103, 1997.	
	J. OPHIR et al., "Elastography : A Quantitative Method For Imaging The Elasticity Of Biological Tissues," Ultrasonic Imaging, Vol. 13, pp. 111-134, 1991.	
	T. L. CHENEVERT et al., "Elasticity Reconstructive Imaging By Means Of Stimulated Echo MRI," Magnetic Resonance in Medicine, Vol. 39, pp. 482-490, 1998.	
	D. B. PLEWES et al., "Visualization And Quantification Of Breast Cancer Biomechanical Properties With Magnetic Resonance Elastography," Phys. in Med. and Bio., Vol. 45, pp. 1591-1610, 2000.	
	A. MANDUCA et al., "Spatio-Temporal Directional Filtering For Improved Inversion Of MR Elastography Images," Medical Image Analysis, pp.465-473, 2003.	
	N. GOKHALE et al., "Simultaneous Elastic Image Registration and Elastic Modulus Reconstruction," IEEE Transactions on Medical Imaging, pp. 543-546, 2004.	
	M. M. DOYLEY et al., "Evaluation of An Iterative Reconstruction Method for Quantitative Elastography," Physics in Medicine and Biology, Vol. 45, pp. 1521-1540, 2000.	
	E. E. W. VAN HOUTEN et al., "Three-Dimensional Subzone-Based Reconstruction Algorithm For MR Elastography," Magnetic Resonance in Medicine, Vol. 45, pp. 827-837, 2001.	
	J. B. FOWLKES et al., "Magnetic-Resonance Imaging Techniques For Detection Of Elasticity Variation," Medical Physics, Vol. 22, pp. 1771-1777, 1995.	

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Sheet	2	of	2	Attorney Docket Number	9823-24U1 (VU0358)

	A. SAMANI et al., "A Constrained Modulus Reconstruction Technique For Breast Cancer Assessment," IEEE Transactions on Medical Imaging, Vol. 20, No. 9, pp. 877-885, 2001.	
	R. MUTHUPILLAI et al., "Magnetic Resonance Imaging Of Transverse Acoustic Strain Waves," Magnetic Resonance in Medicine, Vol. 36, pp. 266-274, 1996.	
	K. J. PARKER et al., "Techniques For Elastic Imaging: A Review," IEEE Engineering in Medicine and Biology, Vol. 96, pp. 52-59, 1996.	
	B. S. GARRA et al., "Elastography Of Breast Lesions: Initial Clinical Results," Radiology, Vol. 202, pp. 79-86, 1997.	
	J. OPHIR et al., "Elastography: Ultrasonic Estimation And Imaging Of The Elastic Properties Of Tissues," IMechE, Vol. 213, Part H, pp. 203-223, 1999.	
	C. SUMI et al., "Estimation Of Shear Modulus Distribution In Soft Tissue From Strain Distribution," IEEE Transactions on Biomedical Engineering, Vol. 42, No. 2, pp. 193-202, 1995.	
	A. P. SARVAZYAN et al., "Biophysical Bases Of Elasticity Imaging," Acoustical Imaging, Vol. 21, pp. 223-240, 1995.	
	S. A. KRUSE et al., "Tissue Characterization Using Magnetic Resonance Elastography: Preliminary Results," Physics in Medicine and Biology, Vol. 45, pp. 1579-1590, 2000.	
	L. V. TSAP et al., "Nonrigid Motion Analysis Based on Dynamic Refinement of Finite Element Models," IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 22, No. 5, pp. 526-543, 2000.	

Examiner Signature		Date Considered	
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